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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/599,968	06/21/2000	Roberto Aiello	FANT-00-013	7156
44279	7590	11/14/2005	EXAMINER	
PULSE-LINK, INC. 1969 KELLOGG AVENUE CARLSBAD, CA 92008			PHU, PHUONG M	
			ART UNIT	PAPER NUMBER
			2631	

DATE MAILED: 11/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No. **09/599,968**Applicant(s) **AIELLO ET AL.**Examiner **Phuong Phu**Art Unit **2631**

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

This Office Action is responsive to the RCE filed on 9/23/05.

#### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fullerton et al (5,677,927), in view of Petch et al (6,243,372) and Fullerton et al (6,133,876) (referred as Fullerton et al II), (all previously-cited).

-Regarding to claim 17, Fullerton et al discloses a cellular telephone system using ultra-wideband spectrum signals for communications (see col. 12, line 65 to col. 13, line 2) wherein the cellular telephone system inherently comprises at least a base station (equivalent with the limitation "master transceiver", and a first mobile unit and a second mobile unit (equivalent with "first slave transceiver" and "second slave transceiver", respectively) in a particular cell for transmitting and receiving the ultra-wideband spectrum signals, and within the cell, the two mobile units communicate to each other via the base station wherein the base station can be configured to comprise a master receiver (see figure 14) including rf front end (1402); a pulse detector (1408) and data recovery unit (1424, 1410, 1414, 1418, 1428) for receiving spread spectrum RF signals having different modulation methods and/or having different pulse repetition frequencies (see also figures 10, 18, 19, 24 and col. 14, lines 44-67 and col. 15, lines 1-24).

Fullerton et al does not disclose whether said base station manage synchronization between said first mobile unit and said second mobile unit.

Petch et al discloses a synchronization between first and second mobile stations (14) managed by a base station (12) in a cellular wireless system (see figure 1), by synchronizing clocks of the first and second mobile stations with the clock of the base station (as being a master clock) (see col. 7, line 61 to col. 8, line 10, col. 10, lines 43-55 and col. 11, lines 27-67).

In addition, Fullerton et al II teaches that in an ultra wide-band spread spectrum "impulse radio" system, synchronization of clocks of a first slave station (1304) and a second slave station (1308), respectively, with a clock of a master station (o) can be achieved by initializing the clocks prior to ultra wide-band spread spectrum "impulse radio" being deployed into operation.

Therefore for an application, it would have been obvious for one skilled in the art, at the time of the invention was made, within his skills, to implement the base station in Fullerton et al system to manage synchronizations between the first mobile unit and the second mobile unit, as taught by Petch et al, by synchronizing clocks of the first and second mobile stations with the clock of the base station (as being a master clock) in such a way that such clock synchronization would initiate the clocks prior to ultra wide-band spread spectrum "impulse radio" being deployed into operation, as taught by Fullerton et al II, so that a network-wide synchronization among the base station and first and second mobile units would be established and maintained for optimal operation of the cellular wireless system, e.g., to minimize interference problems otherwise caused by non-synchronized base and/or mobile station transmissions in the same cell (see Petch et al, col. 1, lines 40-45).

***Response to Arguments***

3. Applicant's arguments filed on 9/23/05 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong Phu whose telephone number is 571-272-3009. The examiner can normally be reached on M-F (6:30-2:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ghayour can be reached on 571-272-3021. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Phuong Phu*

Phuong Phu  
10/21/05

**PHUONG PHU  
PRIMARY EXAMINER**

Phuong Phu  
Primary Examiner  
Art Unit 2631